DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

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PLANS APPROVAL DATE

NOTES-TYPE III SERVICE EQUIPMENT ENCLOSURES

1. Service equipment enclosure and metering equipment shall meet the requirements of the serving utility. When the serving utility provides both metered and unmetered circuits, a separate bus shall be provided for each circuit. The meter area shall have a sealable, lockable, raintight cover that can be removed without the use of tools.

2. Service equipment enclosures shall be factory wired and conform to NEMA Standards and to Section 86-2.11, "Service" of the Standard Specifications.

3. Dimensions of service equipment enclosures shall meet the requirements of the serving utility.

4. The dead front panels on Type III-A service equipment enclosures shall have a continuous stainless steel piano hinge. The panel in front of the breakers shall be secured with captive screws; the lower panel shall be secured with a latch or captive screws. No live parts shall be mounted on the dead front panel.

5. The exterior door shall have provisions for padlocking. The padlock hole shall be a minimum diameter of 11 mm (7/16").

6. Enclosures housing transformers of more than one [1] kVA shall have effective screened ventilation louvers of not less than 32 000 mm^2 (50 square inches). Screen shall be stainless steel No.304, with a No.10 size mesh. Secure screen after painting with at least four bolts and frame

7. Fasteners on the exterior of the enclosure shall be vandal-resistant and shall not be removable from the exterior. All screws, nuts, bolts and washers shall be stainless steel.

8. All terminals for incoming service conductors shall be compatible with either copper or aluminum conductors sized to suit the conductors shown on the plan. Terminal lugs shall be copper or tin-plated aluminum. Solid neutral terminal strip shall be rated for 125 A unless otherwise specified and for use with copper or aluminum conductors. The terminal shall include but not be limited to:

   a) Incoming terminals (landing lugs)
   b) Neutral lugs
   c) Solid neutral terminal strip
   d) Terminal strips for conductors within the enclosure.

9. At least 6 standard single pole circuit breaker spaces, 20 mm (3/4") nominal, shall be provided for branch circuits. Circuit breaker interiors shall be copper. Interiors shall accept plug-in or cable-in/cable-out circuit breakers.

10. All control wiring shall be 600 V, No.14 stranded machine tool wire. Where subject to flexing, 19 strand wire shall be used.

11. Main bus shall be rated for 125 A and shall be tin-plated copper.

12. A plastic laminated wiring diagram shall be provided with brass mounting eyelets and attached to the inside of the enclosure, or the wiring diagram shall be mounted to the interior of the door with an UL or ETL approved method.

13. An engraved phenolic nameplate on the dead front panel indicating the function of each circuit within the enclosure shall be installed with stainless steel rivets or stainless steel screws:

    a) Adjacent to the breaker or device. Character size shall be a minimum of 3 mm (1/8").

    b) At top of the exterior door panel indicating system No., voltage level and number of phases. Character size shall be a minimum of 5 mm (3/16").

14. The plan shows the approximate location of devices within the enclosure. Components may be rearranged. However, the "working" clearances within the enclosure shall be maintained.

15. In unpaved areas a raised portland cement concrete pad 600 mm (24") x 100 mm (4") x width of foundation shall be constructed in front of new service installation. Pad shall be set to elevation of foundation.

16. Foundation shall extend 50 mm (2") minimum beyond edge of enclosure..

17. Terminate conduits 50 mm (2") maximum above top of foundation.

18. Internal bus, where shown, is typical only. Alternative design of proposed service equipment enclosure shall be submitted to the Engineer for approval.

19. Plug-in circuit breakers may be mounted in the vertical or horizontal position. Cable-in/cable-out circuit breakers shall be mounted in the vertical position.

20. On Type III-AF and Type III-BF service equipment enclosures, the meter viewing windows are loctaed on the front side of the service equipment enclosures.

21. The Type III-AR and Type III-BR service equipment enclosures shall be similarly constructed as Type III-AF and Type III-BF respectively, except the meter viewing window shall be located on the back side of the service equipment enclosure.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SIGNAL, LIGHTING AND ELECTRICAL SYSTEMS
SERVICE EQUIPMENT NOTES
TYPE III SERIES

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses (). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

NO SCALE

ES-2C